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ABSTRACT OF THE DISCLOSURE

A ceramic article is disclosed which contains aluminum, silicon, and titanium in a total amount of at least 99 % by weight as reduced to the oxides (Al₂O₃+SiO₂+TiO₂) and assumes an acidic color in methyl red, an indicator of at least pKa +4.8. It can be used as a carrier for a catalyst. This ceramic article is obtained by mixing an aluminum compound, a silicon compound, and a titanium compound and calcining the resultant mixture at a temperature in the range of 1,000° - 2,000°C. A catalyst for preparing ethylene oxide is about 1.

A catalyst for preparing ethylene oxide is obtained by depositing silver and a reaction promotor on the ceramic carrier and ethylene oxide is obtained by oxidizing ethylene with a molecular oxygen-containing gas in the presence of the catalyst in vapor phase.